Once, the borders between different connector markets were very distinct. But today, those borders are rapidly blurring. The automotive market is looking for computer-style connectors for telematic applications. The geophysical and broadcast markets are interested in harsh-environment, military-style connectors. Military markets are exploring the cost effectiveness of telecom-style connectors. All that blurring should bring the extensive capabilities of one source into sharp focus. The source is Delphi.
Connecting to the future

At Delphi, we understand that crossing market borders with proven connection system technologies has become a must. We know our customers want varying solutions and expertise from many markets.

That’s where Delphi’s experience, knowledge and innovation make an important difference. We know connection systems. Our history goes back over 100 years. We’ve created many industry firsts along the way and we continue to develop leading-edge technologies.

We currently serve nine different connection system markets. So when it comes to crossing borders, we can do it in-house, with our own experts waiting to help us on the other side. We’re a Fortune 500® company with a manufacturing footprint that spans Europe, North and South America and the Pacific Rim.

We’re poised to follow you anywhere, with the depth, breadth, strength and discipline start-ups can only dream of. We’re the best-kept secret in the connection business – and we’re ready to be your secret weapon.
Market Expertise

Serving nine different connection system markets makes us very agile when it comes to crossing market borders. Fact is, we leap across them every day. Crossing those borders helps us cross-pollinate: sharing information, sharing ideas, coming up with innovative new solutions.

That’s how we can offer connectivity everywhere from your briefcase to your parking space – with products that help provide information and help connect you to the rest of the world.

Products as varied as port strip connectors for diabetic glucometers, fiber optics that aid the U.S. Navy in ship-to-shore communication, and MOST® connectors for multimedia automotive applications.

Delphi’s product portfolio provides a full range of solutions – from off-the-shelf items to custom designs. With service that exceeds expectations.

Suddenly the idea of market expertise to the ninth power isn’t such a fanciful notion. Maybe it’s time to put that kind of power to work for you.

INDUSTRIAL / INSTRUMENTATION –

From orbiting space stations to underwater oil drilling equipment to every site in between, Delphi is ready to supply high-quality connection systems for these typical industrial and instrumentation applications:

- Analytical Instruments
- Bulkhead Mounts
- Down-hole oil drilling and seismic equipment
- Hybrid Electronics
- Electrical Quantity Measuring
- Industrial Process Controls
- Rack and Panels
- Signal generators
- Telecommunication systems for emulation and simulation
- Testers

Delphi has over a decade of experience in the industrial/instrumentation market, and is known for solving problems and improving productivity.
PORTABLE COMMUNICATIONS —

Whether designed for entertainment or information-sharing, Delphi has precision connection products for these typical portable communications applications:

- Portable Electronic Devices
  - Digital Cameras
  - Mobile Cellular/Cordless Phones
  - Music Recorders/Players
  - PDAs
  - Pocket Pagers

- Video/Audio Products – Digital or Analog
  - Camcorders
  - DVDs
  - TVs
  - VCRs

Delphi has almost 20 years of experience in the portable communications market, starting with portable disk drives back in the early ‘80s. We have the expertise to help with your next project.

MEDICAL —

In the E.R. – in the O.R. – in virtually any medical setting, Delphi has connections for these typical medical equipment applications:

- Patient Monitoring
- Diagnostic Ultrasound Equipment
- Handheld Medical Devices
- Portable Defibrillators
- Dialysis and Respiratory Equipment

Our applicable products fall into these categories:

- Board-to-Board Interconnects
  - from 0.5 mm to 0.100 mm pitch
- Catheter Rotary Connectors
- Compact Battery Devices
  - Connectors and Holders
- Compression Connectors
- Custom Interconnects
- Fine-Pitch Connectors
- Flexible Printed Circuits
- Headers and Receptacles
- High-Density Printed Circuit Connectors
- High-Speed Connectors
- Subminiature Circular Connectors
COMPUTERS AND PERIPHERALS —

Delphi has gone from ship to shore and from distant peaks to city streets – and now we’ve even ventured to the motherboard. We offer precision connection devices for these typical computer and peripheral applications:

- Serial ATA and SCSI Drive Arrays
- Disk Drives
- External Storage Devices
- Mainframes
- Personal Computers
  - Desktop
  - Handheld
  - Laptop
  - Notebook
- Servers
- Work Stations

With our broad range of connectors for board-level applications, we’ve taken our typical outside-the-box thinking right inside the box.

DEFENSE / AEROSPACE —

From deep ocean trenches to deep space probes, Delphi has edge-of-the-art connection products for these typical defense and aerospace applications:

- Aircraft Systems
- Bulkhead Mounts
- Communication, navigation, guidance control, and radar electronics
- Ground Support Systems
- Hybrid Electronics
- Launch Vehicle Systems
- Pierside Connectivity
- Shipboard
- Space Vehicles
- Subsea Geophysical Systems
- Tactical Field Use
- Umbilical Assemblies
- Underwater Towed Arrays

Delphi has been standing side by side with all major U.S. defense contractors as a trusted supplier for over 25 years. Aegis, BLACK HAWK, F-15® – other references are available upon request.
TELECOM / DATACOM — 

Audio, video, data – when it needs to be captured, stored and transmitted, Delphi is ready to help, with connection systems for these typical telecom/datacom applications:

- Broadcast Environments
  - Airports
  - Indoor Studios and Media Centers
  - Outside Programming Environments
  - Satellite Trucks
  - Stadiums
- CATV Systems
- Cellular Base Stations
- Central Office Telephony
- LAN/WAN Equipment
- Network Equipment
  - Hubs and Bridges
  - Multiplexers and Routers
- Parallel Optical Transceivers 2D
- Premise Systems
- Storage Area Networks
- Switching and Transmission Equipment

OFFICE AUTOMATION — 

If it’s electronic and it operates in an office, chances are it can benefit from Delphi connectors in these typical office automation applications:

- Answering Machines
- Copiers
- Fax Machines
- Keyboards
- Modems
- Monitors
- Postage Meters/Scales
- Printers and Scanners
- Security Systems

Our office automation products fit the following categories:

- Board-to-Board Interconnects
- Compact Battery Connectors and Holders
- Custom Interconnects
- Flexible Printed Circuits
- PLCC Sockets
- Snap Lock Connectors
- USB Board Connectors and Cable Assemblies
AUTOMOTIVE —

Delphi connectors can survive the world’s most punishing environment. It’s called a car. Our expertise is global and includes the MOST® connector system for Europe, and USCAR for North America — plus products for these typical automotive applications:

- Body/Chassis
  - ABS
  - Clusters/Head-Up Displays
  - Door Locks
  - HVAC
  - Interior Lighting
  - Seats
  - SIR

- Mobile Multimedia
  - Audio/Video
  - Navigation

- Powertrain
  - Engine
  - Transmission

With over 100 years of experience, nobody knows automotive connections like Delphi.

TRANSPORTATION (NON-AUTOMOTIVE) —

There’s a whole other world of transportation beyond automobiles, and Delphi uses its vast experience to build top-quality connection systems for these typical non-automotive applications:

- Commercial Vehicles
- Marine
- Mass Transit
- Motorcycles
- Off-Road Vehicles
  - Construction
  - Farm and Agriculture
  - Recreation

Here’s just a sampling of our non-automotive transportation product categories:

- Specialized Connection Systems for Hybrid Vehicles and other high-current applications
- Smart Connectors which integrate active electrical functions into the connector
- Harsh Environment Sealed Connections
- Customized Designs for specific functions
- Our vast array of automotive interconnects is also available
Customer Success Stories

Defense Aerospace — A defense/aerospace manufacturer was experiencing problems with a non-Delphi fiber optic connector supplier, which created high replacement and repair costs. Expensive circuit card assemblies were required to repair the broken fibers and devices. Delphi’s optics engineers developed a solution to help eliminate these high rework costs by creating a connector that meets extremely low height and weight requirements. This improved connector design provides a high-reliability, replaceable fiber optic connector and termini system used in harsh environment applications.

Portable Communications — A major mobile electronics manufacturer developed an accessory that slid into a unit and mated with a connector that slid over part of a bare circuit board. Preliminary testing by the OEM showed that the circuit board would damage the contacts after only a few cycles. Delphi was able to provide a new insert-molded connector design to the OEM that utilized a proprietary Teflon® impregnated material. The first design was completed two days after the initial customer meeting. Production parts in tape and reel packaging were shipped six weeks after receiving the customer’s initial order.

Medical Equipment — A key medical device manufacturer was experiencing serious reliability problems with a critical part from another supplier. Delphi’s custom product engineering team redesigned the part and delivered customer-validated, high-volume production quantities within six months. As a result, Delphi was able to help resolve all prior quality issues and provide significant cost savings to the customer. To date, more than six million high-reliability Delphi parts have been shipped to the customer.

Computers and Peripherals — A large computer OEM discovered that after completely redesigning a desktop computer system, the original battery holder did not fit on the circuit board and needed remote mounting. Delphi’s innovative solution eliminated the design problem by creating a holder with cable and connector attached to the circuit board. Prototypes were delivered four weeks after the initial customer meeting, and full production occurred eight weeks after customer approval.

Automotive — Delphi actively participates in USCAR (United States Consortium for Automotive Research) and Electrical Wiring Component Applications Partnership (EWCAP) to develop common designs for electrical connectors to help reduce cost and product complexity, while helping to improve reliability, quality and serviceability. Our ongoing involvement in the technical and design sessions of these consortiums directly influences the development of industry-wide test specifications and design guidelines for electrical components. Ultimately, Delphi’s initiative to help create these common best practices results in faster times to market for OEMs and Tier 1 customers.
Commitment to Customer Success

Design, Engineering Development, and Rapid Prototyping — Delphi’s global engineers utilize virtually every state-of-the-art design and engineering analytical tool to deliver high-function systems. Our intelligent 3D solid modeling design systems can automatically and simultaneously generate sub-component linkages between the various connection system components. Our rapid prototyping, stereo lithography and tool generation (Art-to-Part), provide customers verification for both fit and function. With these tools and our expertise, Delphi can quickly provide optimized solutions.

Product and Process Testing — To deliver high quality, Delphi’s products undergo extensive test sequences according to rigid testing specifications. Our comprehensive test facilities validate new product designs and assess product and material performance. Located in Germany, California and Ohio, Delphi’s test labs have the capability of performing both customer-specific and industry standard testing.

Manufacturing — Delphi’s global manufacturing presence allows us to be your worldwide choice. Our products are manufactured using state-of-the-art equipment and process monitoring technologies. These advanced technologies provide value by helping eliminate waste and allowing continuous improvement. Global common tool and equipment standards help to provide lean, fast, consistent processes. Annually, Delphi manufactures more than:
- 5 billion plastic injection molded parts
- 15 billion metal stamping parts
- 9 billion meters of wiring
- 1 billion cable assemblies

We’re building cost-competitive, quality products worldwide.

Supply Chain Management — Delphi consistently accomplishes global, on-time deliveries through our fast and lean logistic network. By utilizing Internet-based supply chain management techniques, we align supply chain resources to demand. We accurately meet customer-specified requirements and delivery times at individual locations around the world. Delphi’s efficient supply chain also provides superior customer service and support.

Quality and Customer Focus — The Delphi Business System (DBS) provides the foundation for consistency in practices and improvement in processes. Ultimately, the system connects customer expectations and business objectives. DBS exceeds the requirements of internationally recognized quality standards and encompasses all major customer requirements and business processes. Established in all of our global locations, the system supports our vision to Be Recognized by Our Customers As Their Best Supplier.
Delphi has decades of connector expertise. We’ve developed many industry firsts. We design components to help improve overall product performance. And we’re synonymous with quality and service.

We’re a border-jumping, globe-spanning, paradigm-setting team that’s brimming with the expertise and enthusiasm to exceed your every expectation. Your next project deserves everything Delphi can offer.